Claims

1. A substantially pure polypeptide consisting essentially of a BAX ART domain.

2. The polypeptide of claim 1, wherein said BAX is human BAX, mouse BAX, or rat BAX.

3. The polypeptide of claim 1, wherein said polypeptide decreases apoptosis of a cell when administered to said cell.

4. The polypeptide of claim 3, wherein said cell is a degenerative cell.

5. The polypeptide of claim 3, wherein said cell is a human cell.

6. The polypeptide of claim 1, wherein said polypeptide has the sequence MDGSG(E/D)(Q/H)(L/P)(R/G)(S/G)GGPTSSEQI (SEQ ID NO: 1).

7. A recombinant nucleic acid molecule encoding a polypeptide consisting essentially of a BAX ART domain.

8. The nucleic acid molecule of claim 7, wherein said BAX is human BAX, mouse BAX, or rat BAX.

9. The nucleic acid molecule of claim 7, wherein said polypeptide has the sequence MDGSG(E/D)(Q/H)(L/P)(R/G)(S/G)GGPTSSEQI (SEQ ID NO: 1).

10. A pharmaceutical composition comprising a substantially pure polypeptide consisting essentially of a BAX ART domain and a pharmaceutically acceptable excipient.

11. The pharmaceutical composition of claim 10, wherein said polypeptide decreases apoptosis of a cell when administered to said cell.

12. The pharmaceutical composition of claim 11, wherein said cell is a degenerative cell.

13. The pharmaceutical composition of claim 11, wherein said cell is a human cell.

14. The pharmaceutical composition of claim 10, wherein said BAX is human BAX, mouse BAX, or rat BAX.

15. The pharmaceutical composition of claim 10, wherein said polypeptide has the sequence MDGSG(E/D)(Q/H)(L/P)(R/G)(S/G)GGPTSSEQI (SEQ ID NO: 1).

16. A method for decreasing apoptosis of a cell, said method comprising the step of contacting said cell with a substantially pure polypeptide consisting essentially of a BAX ART domain.

17. The method of claim 16, wherein said cell is a degenerative cell.

18. The method of claim 16, wherein said cell is a human cell.

19. The method of claim 16, wherein said BAX is human BAX, mouse BAX, or rat BAX.

20. The method of claim 16, wherein said polypeptide has the sequence MDGSG(E/D)(Q/H)(L/P)(R/G)(S/G)GGPTSSEQI (SEQ ID NO: 1).

21. A method for decreasing apoptosis of a cell, said method comprising the step of expressing in said cell a recombinant nucleic acid molecule encoding a polypeptide consisting essentially of a BAX ART domain.

22. The method of claim 21, wherein said cell is a degenerative cell.

23. The method of claim 21, wherein said cell is a human cell.

24. The method of claim 21, wherein said BAX is human BAX, mouse BAX, or rat BAX.

25. The method of claim 21, wherein said polypeptide has the sequence MDGSG(E/D)(Q/H)(L/P)(R/G)(S/G)GGPTSSEQI (SEQ ID NO: 1).

26. A method for decreasing apoptosis in a mammal, said method comprising administering to said mammal a substantially pure polypeptide consisting essentially of a BAX ART domain.

27. The method of claim 26, wherein said mammal is a human.

28. The method of claim 26, wherein said BAX is human BAX, mouse

BAX, or rat BAX.

29. The method of claim 26, wherein said polypeptide has the sequence MDGSG(E/D)(Q/H)(L/P)(R/G)(S/G)GGPTSSEQI (SEQ ID NO: 1).